

# FLOYD CHEROKEE MEDICAL CENTER POLICY AND PROCEDURE MANUAL Patient Care Services



<b>TITLE: ANTIMICROBIAL STEWARDSHIP (AMS)</b>	<b>Policy No.: C-PCS-06-061</b>
<b>Purpose:</b> : The development of a hospital wide Antimicrobial Stewardship Program to follow current CDC guidelines in the fight against Multi-drug resistant organisms. To continue the collaborative work of the Physicians and Pharmacists in ensuring antibiotics are utilized appropriately for improved patient outcomes.	<b>Developed Date:</b> <b>Review Date:</b> 1/21 <b>Revised Date:</b>
<b>Policy:</b> AMS is a coordinated effort to ensure judicious and effective use of antimicrobial therapy that includes, but is not limited to the appropriate selection, dosing, route of administration, and duration of antimicrobial therapy leading to an end result of less resistant organisms, fewer therapy failures, less adverse effects for patients.	<b>Review Responsibility:</b> CNO, Director of Pharmacy Pharmacy and Therapeutics Committee, Medical Executive Committee

## ANTIMICROBIAL STEWARDSHIP (AMS):

**Definition:** Antimicrobial Stewardship is a coordinated effort to ensure judicious and effective use of antimicrobial therapy that includes but is not limited to the appropriate selection, dosing, route of administration, and duration of antimicrobial therapy.

**GOALS OF AMS:** (all goals leading to an end result of less resistant organisms, fewer therapy failures, less adverse effects for patients)

1. Streamlining therapy based on susceptibilities from the cultures drawn before initiation of therapy (broad spectrum to narrow spectrum therapy)
2. Avoiding therapeutic duplication
3. Appropriate lab levels drawn especially in dealing with time-sensitive peaks and troughs (Vancomycin, Gentamicin)
4. Reduction of hospital-acquired infections (C.diff)
5. Appropriate renal dosing and dose optimization for the antimicrobial selected
6. Monitoring of drug-resistant pathogens within each facility and reporting that information to the appropriate committees (P&T)

7. Multi-disciplinary approach to evaluate and address the “5 D’s” of Antimicrobial Stewardship:
  - a. Diagnosis
  - b. Drug
  - c. Dose
  - d. De-escalation
  - e. Duration

## **PROCEDURE:**

### **Current Pharmacy and Infection Control Daily workflow:**

1. Microbiology results reviewed daily (MRSA, C.diff, VRE are flagged separately within dashboard)
2. Possible Multiple Drug Resistant organisms are identified, reviewed, and reported
3. De-escalation (broad to narrow spectrum) of antibiotics if appropriate
4. IV to PO conversion for antibiotics with similar bioavailability’s (Azithromycin, Levaquin, Clindamycin, etc.) for eligible patients (tolerating PO meds, no PEG tube, etc.)
5. Identification of duplicate therapy
6. Renal dosing recommendations for affected patients
7. Pharmacokinetic dosing / dosing optimization (Gentamicin, Vancomycin)
8. Pharmacist contacts Physician directly with any dosing recommendations or changes. Interventions are documented in the intervention Notes in Evident.

### **Guidelines implemented within the facility to aid in appropriate antimicrobial prescribing and dosing:**

1. Policies addressing specific issues dealing with dosing and prescribing of antimicrobials:
  - Renal Dosing Policy
  - Once –daily Aminoglycoside Policy. Peak concentrations with the extended interval dosing are much greater than when the dose is divided into multiple daily doses leading to higher concentration-dependent bacterial killing.
  - Vancomycin dosing guidelines: recent lab change to reflect a desired trough of 15-20mcg/mL
  - Preferred Carbapenem Policy
  - Extended Infusion Zosyn
  - Guidelines for care of the patient with C.diff
2. Limited Formulary antimicrobials
3. Auto-substitution of certain antimicrobials (Rocephin for Claforan, Azithromycin for Erythromycin, Levaquin IV for Cipro IV)

4. **Implementation of evidence-based Zynx order sets.** Physician order entry offers nearly unlimited potential to provide guidance and decision support to improve antimicrobial prescribing on the front end.
5. Time-sensitive Automatic Stop Orders allowing reviews by the physician. Limited days on antimicrobials to allow for “time-out” for de-escalation or review of C&S.
6. Quarterly review of antibiogram presented at P&T. Copy available at meeting.
7. Report to P&T quarterly if any resistant strains were identified within this facility.
8. Issues that arise concerning an antimicrobial can be analyzed and feedback provided to the appropriate committees via MUE (Medication Use Evaluation).
9. Facility specific treatment recommendations reviewed at least annually
10. **The facility ICP with the CQO and CNO will perform periodic random audits and collaborate with the Infection Control Committee for appropriateness and outcome review.**